

South Africa's Graduate Pipeline

July 2026

Executive summary

Human capital remains one of South Africa's most important long-term growth drivers. As the country seeks to address persistently high unemployment, improve productivity and compete in an increasingly knowledge-based global economy, the higher education system plays a critical role in supplying graduates with the skills required by both the public and private sectors. Annual performance targets set by the Department of Higher Education and Training (DHET) therefore provide an important measure of whether the education system is keeping pace with national development priorities.

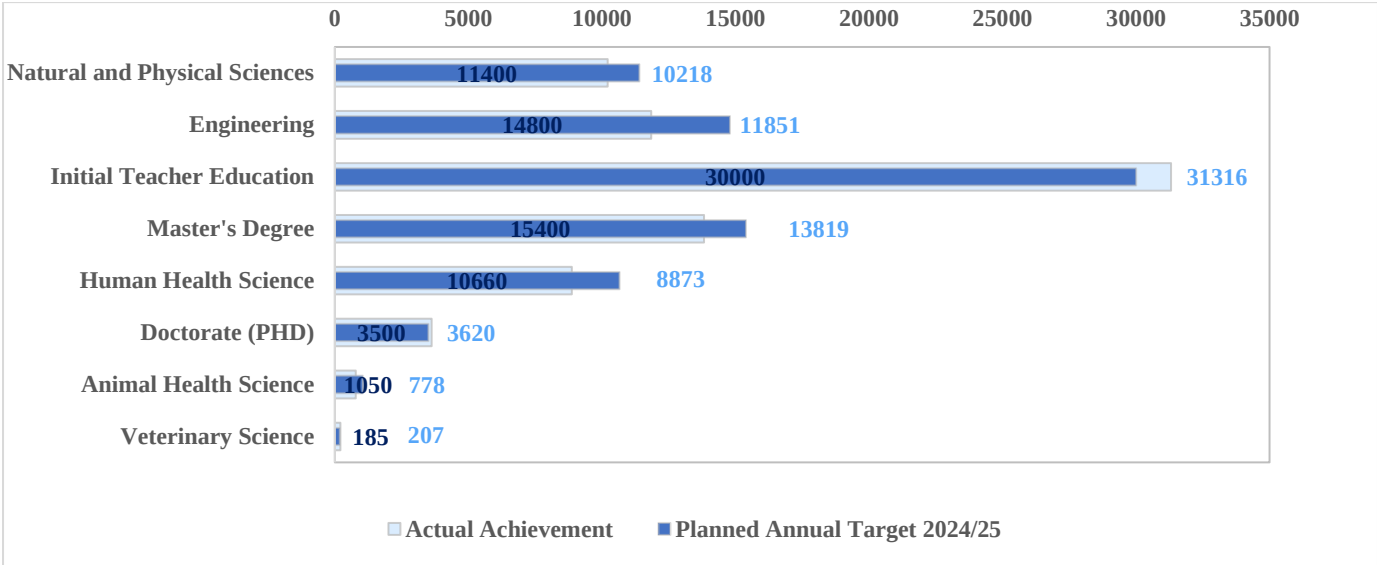
The Department's 2024/25 Annual Report highlights strong performance in several strategic qualification areas, with Initial Teacher Education, Veterinary Science and doctoral graduates exceeding annual targets. However, performance in other critical areas remained below expectations, particularly Human Health Sciences, Engineering, Natural and Physical Sciences, and Master's degree completions. While NSFAS exceeded its funding targets, university enrolments and overall graduate completions remained below planned levels, indicating that expanding access to higher education must be accompanied by stronger student progression and completion outcomes. These findings highlight the importance of strengthening South Africa's skills pipeline in line with national development priorities, including the objectives of the National Development Plan (NDP) 2030 to expand human capital, improve skills development and promote economic transformation.

Recent labour market data further reinforce the importance of expanding graduate output, with unemployment rates declining sharply among individuals with tertiary qualifications, demonstrating the role of higher education in improving employment outcomes and strengthening South Africa's human capital base.

Analysis

MIXED PERFORMANCE ACROSS PRIORITY QUALIFICATIONS

Figure 1: Planned vs Actual Graduate Output for Selected Qualifications (2024/25)



Source: DHET & HEI Research

The Department's 2024/25 Annual Report presents a mixed picture of progress across South Africa's priority qualification programmes, with strong performance in selected fields alongside persistent shortfalls in areas linked to critical skills development. Initial Teacher Education recorded the strongest performance, with 31,316 graduates compared to a target of 30,000, while Veterinary Science also surpassed expectations by producing 207 graduates against a target of 185. Doctoral qualifications similarly exceeded their annual target, with 3,620 PhD graduates compared to the planned 3,500.

The growth in doctoral graduates is particularly encouraging, as it strengthens South Africa's research capacity, supports innovation and contributes to the development of high-level technical and academic expertise. Likewise, exceeding teacher education targets supports government efforts to improve educational outcomes over the longer term, while additional veterinary graduates strengthen capacity within the country's agricultural sector, where animal health remains critical for livestock productivity, food security and export competitiveness.

Despite these positive developments, several priority fields fell below target. Human Health Sciences recorded one of the largest shortfalls, producing 8,873 graduates compared to a target of 10,660, while Engineering qualifications reached 10,218 graduates against a target of 11,400. Natural and Physical Sciences also underperformed, with 11,851 graduates compared to the planned 14,800, while Animal Health Science achieved only 778 graduates against a target of 1,050. Master's degree completions also remained below target, reaching 13,819 compared to the expected 15,400.

The underperformance in health-related qualifications is particularly significant given South Africa's ongoing healthcare workforce pressures and the need to expand the availability of skilled medical professionals. South Africa's rural areas, where more than 20 million people reside, continue to experience significant healthcare workforce constraints, with rural regions served by approximately 12% of the country's doctors and less than 20% of its professional nurses. This uneven distribution of healthcare professionals contributes to persistent inequalities in access to healthcare services, particularly in underserved communities. Provinces such as the Eastern Cape and Limpopo continue to face shortages of general practitioners and specialised nurses, contributing to longer waiting times and delayed access to treatment. Expanding health-related qualifications is therefore critical not only for addressing immediate healthcare workforce shortages but also for improving equitable service delivery across the country.

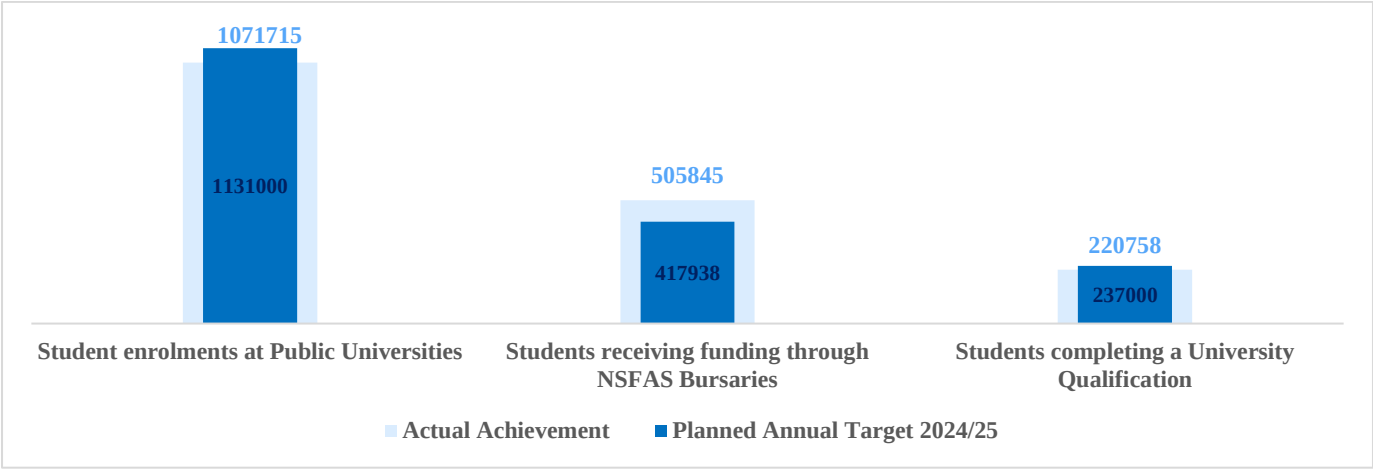
Engineering qualifications also remained below target, despite the sector's critical role in supporting South Africa's economic development. As the country continues to address longstanding electricity supply constraints and modernise and expand its energy infrastructure, demand for engineering skills remains high. This is reflected in South Africa's Transmission Development Plan, under which more than 1,160 km of new transmission infrastructure has been completed as of July 2026, with government indicating that additional engineers will be

needed to deliver future phases of the programme. Continued shortfalls in engineering graduates may therefore constrain the country's ability to expand energy infrastructure and support broader infrastructure development and industrial growth.

Similarly, lower Master's degree completions may constrain South Africa's ability to expand the postgraduate pipeline required to support future doctoral training, research capacity and the development of specialised skills. This is particularly relevant to national development objectives outlined in the National Development Plan (NDP) 2030, which identifies education, skills development, research and innovation as key drivers of economic transformation and improved productivity. Although progress has been made in selected fields, uneven performance across strategic qualifications highlights the continued challenge of aligning graduate output with South Africa's evolving labour market and development priorities.

EXPANDING ACCESS DOES NOT NECESSARILY TRANSLATE INTO GRADUATE SUCCESS

Figure 2: University Performance Against Annual Targets (2024/25)



Source: DHET & HEI Research

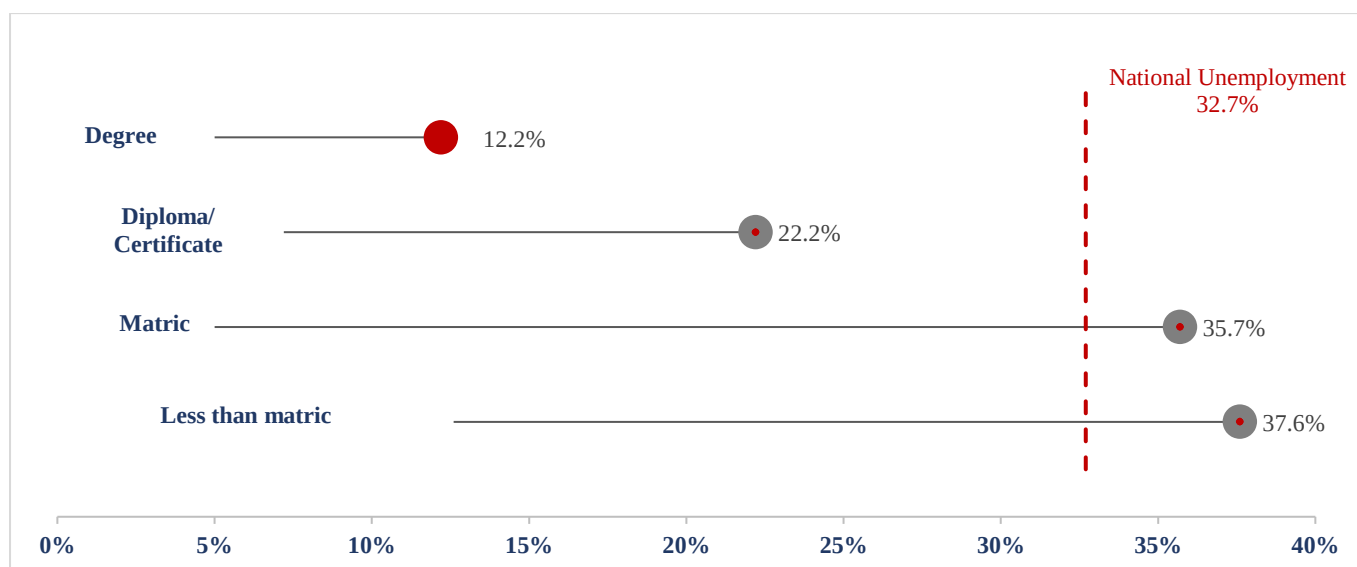
The broader higher education indicators further illustrate the challenges facing South Africa's higher education system. Student enrolment at public universities reached approximately 1.07 million students, falling slightly short of the annual target of 1.13 million. In contrast, NSFAS significantly exceeded its funding target, providing financial assistance to 505,845 students compared to the planned 417,938 beneficiaries.

The expansion in student financial support represents an important achievement in improving access to higher education, particularly for students from lower-income households. By reducing financial barriers, NSFAS continues to play a central role in broadening participation and promoting greater equity within South Africa's tertiary education system.

However, increased access has not yet translated into proportionate improvements in graduate outcomes. Universities produced 220,758 graduates during the reporting period, below the target of 237,000 qualifications. This suggests that while more students are receiving financial support, many continue to face challenges that limit successful completion of their studies.

The results indicate that expanding access alone is insufficient to meet South Africa's long-term skills requirements. Student retention, academic success and institutional capacity remain equally important determinants of graduate output. Addressing these challenges will be essential if South Africa is to close critical skills gaps in sectors such as healthcare, engineering, and the natural and physical sciences, where demand for highly skilled professionals continues to grow.

Figure 3: Unemployment Rate by Highest Educational Attainment (Q1 2026)



Source: DHET & HEI Research

The importance of improving graduate output is reinforced by South Africa's labour market outcomes. Statistics South Africa's Q1 2026 data highlight a strong relationship between educational attainment and unemployment, with higher levels of education associated with significantly lower unemployment rates.

Individuals whose highest qualification is matric recorded an unemployment rate of 35.7%, above the national unemployment rate of 32.7%. By contrast, those with a post-school diploma or certificate experienced a substantially lower unemployment rate of 22.2%, while university graduates recorded the lowest unemployment rate at 12.2%. These figures suggest that obtaining a tertiary qualification significantly improves employment prospects in South Africa's challenging labour market.

The findings also underscore the economic value of higher education beyond individual earnings. A larger pool of university graduates not only improves labour market outcomes for young people but also strengthens South Africa's productive capacity by supplying skilled professionals across the healthcare, education, engineering, natural and physical sciences, and broader technology sectors. Against this backdrop, the shortfalls in graduate output highlighted earlier in the report represent more than missed education targets; they also imply missed opportunities and slower progress in addressing skills shortages and improving employment outcomes to support long-term economic growth.

Outlook

South Africa's higher education system continues to make meaningful progress in expanding educational opportunities, particularly through increased financial support for students and improved performance in selected strategic qualifications. The strong output of doctoral graduates, teachers and veterinary professionals demonstrates that targeted policy interventions can produce positive results in areas aligned with national development objectives.

Nevertheless, the country's ability to convert greater access into higher levels of graduate success remains uneven. Persistent shortfalls in health sciences, engineering, the natural and physical sciences, postgraduate education, and overall qualification completions suggest that improving student retention and completion rates will be just as important as expanding enrolment. As South Africa seeks to strengthen economic growth, improve public service delivery and transition towards a more knowledge-driven economy, ensuring a steady pipeline of highly skilled graduates will remain a strategic priority. Recent labour market outcomes further reinforce this priority, with individuals holding tertiary qualifications experiencing substantially lower unemployment rates than those with lower levels of education, highlighting the economic returns to investing in higher education.

Looking ahead, continued investment in universities, stronger academic support systems and closer alignment between tertiary education and labour market needs will be essential to narrowing existing skills gaps. Success in these areas will not only improve employment prospects for graduates but also enhance South Africa's long-term productivity, innovation capacity and international competitiveness.